

WHAT IS CLAIMED IS:

1. An authenticating method for short-distance radio devices, comprising the steps of:

preparing a condition where a plurality of radio devices exist, each of said radio devices comprising data communicating means for performing short-distance radio communication and authenticating means for performing authentication of said radio device; and

performing mutual authentication between two radio devices by said authenticating means automatically or after confirmation by users of said radio devices when the two radio devices come closer to each other to such an extent that coverage areas of radio waves generated by the two radio devices overlap with each other.

2. An authenticating method for short-distance radio devices according to Claim 1, wherein the step of performing the authentication by said authenticating means is performed in a state where a transmission output of said radio device is reduced to shorten a communication distance of said radio device.

3. An authenticating method for short-distance radio devices according to Claim 2, wherein the transmission

output is reduced only in a particular one of said radio devices.

4. An authenticating method for short-distance radio devices according to Claim 2, wherein the transmission output is reduced upon turning-on of an authentication button provided on said radio device.

5. An authenticating method for short-distance radio devices according to Claim 1, wherein the step of performing the authentication by said authenticating means is performed in a state where reception sensitivity of said radio device is reduced to shorten a communication distance of said radio device.

6. An authenticating method for short-distance radio devices according to Claim 5, wherein the reception sensitivity is reduced only in a particular one of said radio devices.

7. An authenticating method for short-distance radio devices according to Claim 5, wherein the reception sensitivity is reduced upon turning-on of an authentication button provided on said radio device.

8. An authenticating method for short-distance radio devices according to Claim 1, wherein said radio device is a portable device.

9. A short-distance radio device comprising data communicating means for performing short-distance radio communication and authenticating means for performing authentication of said radio device,

    said authenticating means of said radio device performing, in a condition where a plurality of radio devices exist, mutual authentication between two radio devices automatically or after confirmation by users of said radio devices when the two radio devices come closer to each other to such an extent that coverage areas of radio waves generated by the radio devices overlap with each other.

10. A short-distance radio device according to Claim 9, wherein said authenticating means performs the authentication in a state where a transmission output of said radio device is reduced to shorten a communication distance of said radio device.

11. A short-distance radio device according to Claim 10, wherein the transmission output is reduced only in a particular one of said radio devices.

12. A short-distance radio device according to Claim 10, wherein the transmission output is reduced upon turning-on of an authentication button provided on said radio device.

13. A short-distance radio device according to Claim 9, wherein said authenticating means performs the authentication in a state where reception sensitivity of said radio device is reduced to shorten a communication distance of said radio device.

14. A short-distance radio device according to Claim 13, wherein the reception sensitivity is reduced only in a particular one of said radio devices.

15. A short-distance radio device according to Claim 13, wherein the reception sensitivity is reduced upon turning-on of an authentication button provided on said radio device.

16. A short-distance radio device according to Claim 9, wherein said radio device is a portable device.